

Air Quality Permitting Response to Public Comments

July 14, 2017

Permit to Construct No. P-2017.0016

Project No. 61861

Staker Parson Companies dba Idaho Materials and Construction Twin Falls, Idaho

Facility ID No. 083-00193

Prepared by: Tom Burnham, Permit Writer AIR QUALITY DIVISION

Final

BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct for Staker Parson Companies dba Idaho Materials and Construction from May 25 through June 26, 2017, in accordance with IDAPA 58.01.01.209.01.c. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section. All comments submitted in response to DEQ's proposed action are included in the appendix of this document.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the proposed permit are summarized below. Questions, comments, and/or suggestions received during the comment period that <u>did not relate to the air quality aspects</u> of the permit application, the Department's technical analysis, or the proposed permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: http://adminrules.idaho.gov/rules/current/58/0101.pdf.

According to the Application Scope section of the Statement of Basis (SOB), operating the asphalt plant requires input of a mixture of crushed fines and aggregates from a collocated rock crusher (p. 5 in SOB). DEQ states that the rock crusher will be permitted separately from this facility, despite the fact that operations at this facility inherently rely on the rock crusher, and that the rock crusher will be located on the same premises as other equipment. In light of this, it is inappropriate to omit the rock crusher from this PTC. As part of including the rock crusher in the PTC, the uncontrolled potential to emit should be recalculated to include emissions from the rock crusher. Inclusion of the crusher is important as it may affect whether or not this facility should be classified as a synthetic minor.

If DEQ retains its decision to permit this equipment separately, we ask that justification for this option, including citations of relevant rules or regulations that allow for collocated, operationally necessary equipment to be excluded from a PTC, be included in the response to comments.

Response 1: A collocated rock crusher will be permitted as a portable source under IDAPA 58.01.01.790-799 Rules for the Control of Nonmetallic Mineral Processing Plants. All emissions from the process will be fugitive and managed by best management practices as found in IDAPA 58.01.01.799.

As a stationary source, the Hot Mix Asphalt (HMA) plant is being permitted under IDAPA 58.01.01.200-228 Procedures and Requirements for Permits to Construct. Fugitive emissions do not count toward potential to emit (PTE) in accordance with the definition of a stationary source in IDAPA 58.01.01.006.121, which states in part "...fugitive emissions shall not be considered in determining whether a permit is required unless required by federal law." Rock crushing activities create fugitive emissions as they are "Those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening" (see IDAPA 58.01.01.006.47). Therefore, emissions from rock crushing activities do not count toward the stationary source PTE and would not be included with emissions from the HMA plant.

Comment 2: When calculating this facilities potential to emit (PTE), modeling efforts excluded any emission sources outside of a 1,000 ft. radius from the proposed plant location. There is no technical explanation of why 1,000 ft. was chosen. We ask that DEQ provide the technical reasoning behind why 1,000 ft. was selected and details on the level of assurances this buffer provides for compliance with any applicable NAAQS.

- Response 2: DEQ's uses of a 1000-foot radius as a threshold for including other emissions sources in the cumulative NAAQS impact analysis of a hot mix asphalt plant. This distance was established by DEQ air modeling staff and was based on professional judgement and experience considering the following:
 - 1. Emissions sources at hot mix asphalt plants tend to have low emission release heights, especially for particulate pollutant sources (fugitive emissions from the handling of aggregate materials, conveyor transfer of material, etc.). This results in maximum impacts at locations relatively close to the emission sources. Maximum impacts at specific receptors typically decrease rapidly with increasing distance from the source, and beyond 1,000 feet impacts have typically decreased to the point where impacts from a co-contributing source are not an important consideration (beyond that accounted for by background concentrations, as described below).
 - 2. Short-term emissions standards (1-hour and 24-hour averaging periods) tend to be the critical drivers in the air impact analyses for HMA plants. An emissions plume from a co-contributing source must overlap rather precisely with the permitted source for there to be a NAAQS compliance-affecting contribution for short-term sources. DEQ air modeling staff contend, based on experience and professional judgement, this will not typically occur for sources located over 1,000 feet from source-types associated with hot mix asphalt plants. During most periods, the plumes do not overlap and the two sources impact different areas for any given time.
 - 3. Effects of sources beyond 1,000 feet from the permitted plant are accounted for by use of a background concentration, which is added to the modeled impact of the permitted plant. Background concentrations are based on either regional-scale airshed modeling or monitored concentrations at specific locations determined as representative of the area surrounding the permitted plant. DEQ modeling staff contend that potential impacts from non-modeled co-contributing sources are likely overstated by background concentrations because the modeled or monitored design value is used from the population of values. Design values are the high-level impacts that are compared to the air quality standards, and they are at the upper ends of monitored value distributions for short-term standards. It is very unlikely that such values will coincide with design values obtained by the modeled impacts of the permitted plant.
- Comment 3: Pursuant to IDAPA 58.01.01.701, any process or process equipment commencing operation on or after October 1, 1979, is prohibited from emitting particulate matter in excess of equations listed in 701(a) and 701(b). As discussed in previous comments, the rock crusher that will be present on site must be included in this PTC. The PM emission calculations required by IDAPA 58.01.01.701 must therefore also be performed for the rock crusher and included as part of this PTC. Once again if DEQ retains its decision to permit the rock crusher separately then we ask to see justification as to how this facility complies with IDAPA 58.01.01.701.
- Response 3: IDAPA 58.01.01.701 regulates PM₁₀ emissions for a "source" to a limit of E "...where E is the allowable emission from the entire source..." IDAPA 58.01.01.006.114 identifies a "source" as "a stationary source" and the rock crushing activities will permitted as a portable source. In addition, as discussed previously emissions from rock crushing activities are fugitive and are not considered emissions from a stationary source. Therefore, the requirements of IDAPA 58.01.01.701 do not apply to the fugitive emissions from rock crushing activities.

Appendix

Public Comments Submitted for

Permit to Construct

P-2017.0016



208.345.6933 • PO Box 844, Boise, ID 83702 • www.idzhokonservation.org

6/20/17

Tom Burnham Air Quality Division DEQ State Office 1410 N. Hilton Boise, ID 83706 Tanya Chin Air Quality Division DEQ State Office 1410 N. Hilton Boise, ID 83706

Submitted via email: tanya.chin@deq.idaho.gov and tom.burnham@deq.idaho.gov

RE: Air Quality Permit to Construct for Staker Parsons Companies in Twin Falls, ID

Dear Ms. Chin and Mr. Burnham:

Thank you for the opportunity to comment on the draft air quality permit to construct for Staker Parsons Companies proposed hot-mix asphalt plant in Twin Falls, ID.

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's air quality.

Our detailed comments are provided following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or ahopkins@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely, Other

Austin Hopkins

Conservation Associate

RE: Idaho Conservation League comments on Air Quality Permit to Construct for Staker Parsons Companies in Twin Falls, ID

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Omission of Rock Crusher in PTC

According to the *Application Scope* section of the Statement of Basis (SOB), operating the asphalt plant requires input of a mixture of crushed fines and aggregates from a collocated rock crusher (p. 5 in SOB). DEQ states that the rock crusher will be permitted separately from this facility, despite the fact that operations at this facility inherently rely on the rock crusher, and that the rock crusher will be located on the same premises as other equipment. In light of this, it is inappropriate to omit the rock crusher from this PTC. As part of including the rock crusher in the PTC, the uncontrolled potential to emit should be recalculated to include emissions from the rock crusher. Inclusion of the crusher is important as it may affect whether or not this facility should be classified as a synthetic minor.

If DEQ retains its decision to permit this equipment separately, we ask that justification for this option, including citations of relevant rules or regulations that allow for collocated, operationally necessary equipment to be excluded from a PTC, be included in the response to comments.

1,000 ft. Radius in Emissions Modeling

When calculating this facilities potential to emit (PTE), modeling efforts excluded any emission sources outside of a 1,000 ft. radius from the proposed plant location. There is no technical explanation of why 1,000 ft. was chosen. We ask that DEQ provide the technical reasoning behind why 1,000 ft. was selected and details on the level of assurances this buffer provides for compliance with any applicable NAAQS.

Particulate Matter Emission Limits

Pursuant to IDAPA 58.01.01.701, any process or process equipment commencing operation on or after October 1, 1979, is prohibited from emitting particulate matter in excess of equations listed in 701(a) and 701(b). As discussed in previous comments, the rock crusher that will be present on site must be included in this PTC. The PM emission calculations required by IDAPA 58.01.01.701 must therefore also be performed for the rock crusher and included as part of this PTC. Once again if DEQ retains its decision to permit the rock crusher separately then we ask to see justification as to how this facility complies with IDAPA 58.01.01.701.